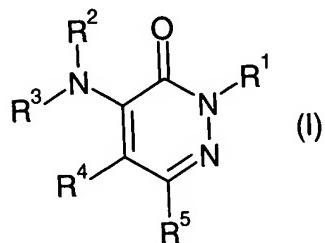


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A pyridazinone derivative of formula (I)



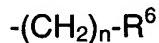
wherein

R¹ represents:

- a hydrogen atom;
- a group selectedchosen from acyl, alkoxycarbonyl, carbamoyl, monoalkylcarbamoyl or-and dialkylcarbamoyl;
- an alkyl, alkenyl or alkynyl group, which wherein the alkyl, alkenyl or alkynyl group is optionally substituted by one or more substituents selectedchosen from halogen atoms, and hydroxy, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- or-and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl or-and mono- or-and di-alkylcarbamoyl groups;
- an aryl or heteroaryl group, which wherein the aryl or heteroaryl group is optionally substituted by one or more substituents selectedchosen from halogen atoms, and hydroxy, hydroxylalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxycarbonyl, aryloxy, acyl, acyloxy, alkylthio, arylthio, amino, nitro, cyano, mono- and or di-alkylamino, acylamino, carbamoyl, or amino,

mono- ~~and~~ or-di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy, ~~and~~ or-trifluoromethoxy groups;

- a saturated or unsaturated heterocyclic group, ~~which wherein the saturated or unsaturated heterocyclic group~~ is optionally substituted by one or more substituents ~~selected chosen~~ from halogen atoms, ~~and~~ hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxycarbonyl, aryloxy, acyl, acyloxy, alkylthio, arylthio, oxo, amino, nitro, cyano, mono- ~~or and~~ di-alkylamino, acylamino, carbamoyl, ~~or~~ mono- ~~or and~~ di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy, ~~or and~~ trifluoromethoxy groups; or
- a group of formula



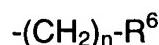
wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents ~~selected chosen~~ from halogen atoms, ~~and~~ alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio, amino, mono- ~~or and~~ di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- ~~and~~ ~~or~~ di-alkylcarbamoyl, cyano, trifluoromethyl, difluoromethoxy, ~~and~~ ~~or~~ trifluoromethoxy groups;
- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms ~~selected chosen~~ from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents ~~selected chosen~~ from halogen atoms, ~~and~~ alkyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- ~~and~~ ~~or~~ di-alkylamino, nitro, cyano ~~and~~ ~~or~~ trifluoromethyl groups;

R² represents:

- a hydrogen atom;

- a group selectedchosen from acyl, alkoxycarbonyl, carbamoyl, monoalkylcarbamoyl and or dialkylcarbamoyl;
- an alkyl, alkenyl or alkynyl group, which wherein the alkyl, alkenyl or alkynyl group is optionally substituted by one or more substituents selectedchosen from halogen atoms, and hydroxy, alkoxy, hydroxycarbonyl, alkoxycarbonyl, aryloxy, alkylthio, arylthio, oxo, amino, mono- and or di-alkylamino, acylamino, carbamoyl, and or mono- and or di-alkylcarbamoyl groups;
- an aryl or heteroaryl group, which wherein the aryl or heteroaryl group is optionally substituted by one or more substituents selectedchosen from halogen atoms, and hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxycarbonyl, aryloxy, acyl, acyloxy, alkylthio, arylthio, amino, nitro, cyano, mono- and or di-alkylamino, acylamino, carbamoyl, or mono- and or di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy, and or trifluoromethoxy groups;
- a saturated or unsaturated heterocyclic group, which wherein the saturated or unsaturated heterocyclic group is optionally substituted by one or more substituents selectedchosen from halogen atoms, and hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxycarbonyl, aryloxy, acyl, acyloxy, alkylthio, arylthio, oxo, amino, nitro, cyano, mono- and or di-alkylamino, acylamino, carbamoyl, or mono- and or di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and or trifluoromethoxy groups; or
- a group of formula



wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents selectedchosen from halogen atoms and alkyl,

hydroxy, alkoxy, alkylenedioxy, alkylthio, amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, cyano, trifluoromethyl, difluoromethoxy, and trifluoromethoxy groups;

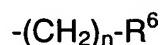
- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms selectedchosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents selectedchosen from halogen atoms, and alkyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- and di-alkylamino, nitro, cyano, and trifluoromethyl groups;

R^3 represents a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl group, which wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are is-optional substituted by one or more substituents selectedchosen from:

- halogen atoms;
- alkyl and alkylene groups, which wherein the alkyl and alkylene groups are optional substituted by one or more substituents selectedchosen from halogen atoms, and phenyl, hydroxy, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups; and
- phenyl, hydroxy, hydroxyalkyl, alkoxy, cycloalkoxy, nitro, cyano, aryloxy, alkylthio, arylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfamoyl, -acyl, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'- dialkylureido, alkylsulfamido, aminosulfonyl, mono- and di-alkylaminosulfonyl, difluoromethoxy, and trifluoromethoxy groups;

R^4 represents:

- a hydrogen atom;
- a hydroxy, alkoxy, amino, monoalkylamino, dialkylamino or cyano group;
- an alkyl-, alkenyl or alkynyl group, whichwherein the alkyl, alkenyl or alkynyl group is optionally substituted by one or more substituents selectedchosen from halogen atoms, and hydroxy, acyloxy, alkoxy, aryloxy, alkylthio, arylthio, amino, mono- and or-di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, alkoxyimino, carbamoyl, and mono- and or-di-alkylcarbamoyl groups;
- or a group of formula

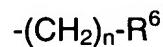


wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents selectedchosen from halogen atoms, and alkyl, hydroxy, alkoxy, alkyleneedioxy, alkylthio, amino, mono- and or-di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and or-di-alkylcarbamoyl, cyano, trifluoromethyl, difluoromethoxy, and or trifluoromethoxy groups;—
- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms selectedchosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents selectedchosen from halogen atoms, and alkyl, phenyl, alkoxyphenyl, halophenyl, pyridyl, alkoxycarbonyl, hydroxy, alkoxy, alkyleneedioxy, amino, mono- and or-di-alkylamino, nitro, cyano, and or trifluoromethyl groups;

R⁵ represents a group -COOR⁷ or a monocyclic or polycyclic aryl- or a monocyclic or polycyclic heteroaryl group, which wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are is optionally substituted by one or more substituents selected chosen from:

- halogen atoms;
- alkyl and alkenyl groups, which wherein the alkyl and alkenyl groups are optionally substituted by one or more substituents selected chosen from halogen atoms, and phenyl, hydroxy, hydroxyalkyl, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl groups; and
- phenyl, hydroxy, alkylenedioxy, alkoxy, cycloalkyloxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfamoyl, amino, mono- and di-alkylamino, acylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulfamido, aminosulfonyl, mono- and di-alkylaminosulfonyl, cyano, difluoromethoxy, and trifluoromethoxy groups;
- wherein R⁷ represents
 - an alkyl, which is optionally substituted by one or more substituents selected chosen from halogen atoms, and hydroxy, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups,
 - or a group of formula



wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents ~~selected~~chosen from halogen atoms, ~~and~~ alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio, amino, mono- ~~and~~ ~~or~~ di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- ~~and~~ ~~or~~ di-alkylcarbamoyl, cyano, trifluoromethyl, difluoromethoxy, ~~and~~ ~~or~~ trifluoromethoxy groups;
- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms ~~selected~~chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents ~~selected~~chosen from halogen atoms, ~~and~~ alkyl, phenyl, alkoxyphenyl, halophenyl, pyridyl, alkoxycarbonyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- ~~and~~ ~~or~~ di-alkylamino, nitro, cyano, ~~and~~ ~~or~~ trifluoromethyl groups;

~~and their salts or N-oxides thereof~~ for a salt thereof, or a N-oxide thereof;

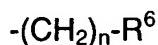
with the proviso that when R¹ is methyl, R² is H, and both R³ and R⁵ are phenyl then R⁴ is not a 1-hydroxyethyl group.

2. (Currently Amended) A compound according to claim 1, wherein R¹ is ~~selected~~chosen from the group consisting of ~~hydrogen atoms and alkyl groups, which~~wherein the alkyl groups are optionally substituted by one or more substituents ~~selected~~chosen from halogen atoms, ~~and~~ hydroxy, alkoxy, alkylthio, hydroxycarbonyl and alkoxycarbonyl groups
3. (Currently Amended) A compound according to claim 2 wherein R¹ is ~~selected~~chosen from the group consisting of unsubstituted C₁₋₄ alkyl groups.

4. (Currently Amended) A compound according to any preceding claim 1, wherein R² is selected from the group consisting of:
- hydrogen atoms,
 - an acyl group,
 - an alkyl group, which is optionally substituted by one or more substituents selected from halogen atoms, and hydroxy, alkoxy, and alkylthio groups; and
 - aryl or heteroaryl groups, which wherein the aryl and heteroaryl groups are optionally substituted by one or more substituents selected from halogen atoms, and hydroxy, hydroxalkyl, hydroxycarbonyl, alkoxy, alkyleneedioxy, alkoxycarbonyl, aryloxy, acyl, acyloxy, alkylthio, arylthio, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, or mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy, and trifluoromethoxy groups; ;
5. (Original) A compound according to claim 4 wherein R² is a hydrogen atom.
6. (Currently Amended) A compound according to any preceding claim 1, wherein R³ represents a monocyclic or polycyclic, aryl or a monocyclic or polycyclic heteroaryl group, which wherein the monocyclic or polycyclic, aryl or the monocyclic or polycyclic heteroaryl group are optionally substituted by one or more substituents selected from:
- halogen atoms;
 - alkyl and alkylene groups, which wherein the alkyl and alkylene groups are optionally substituted by one or more substituents selected from halogen atoms, and phenyl, hydroxy, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- or di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl and mono- and di-alkylcarbamoyl groups; and
 - phenyl, hydroxy, hydroxalkyl, alkoxycarbonyl, alkoxy, cycloalkoxy, nitro, cyano, aryloxy, alkylthio, arylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfamoyl,

acyl, amino, mono- and or-di-alkylamino, acylamino, hydroxycarbonyl, carbamoyl, mono- and or-di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulfamido, aminosulfonyl, mono- and or-di-alkylaminosulfonyl, difluoromethoxy, and or-trifluoromethoxy groups;‡

7. (Currently Amended) A compound according to claim 6, wherein R³ represents a monocyclic or polycyclic, aryl or a monocyclic or polycyclic heteroaryl group, which wherein the monocyclic or polycyclic, aryl or the monocyclic or polycyclic heteroaryl group are optionally substituted by one substituent selected chosen from halogen atoms, alkyl groups and hydroxycarbonyl groups.
8. (Currently Amended) A compound according to claim 7, wherein R³ represents a phenyl groups or a monocyclic or polycyclic N-containing heteroaryl group, which groups wherein the phenyl group or the monocyclic or polycyclic N-containing heteroaryl group may be substituted by one substituent selected chosen from halogen atoms, alkyl groups and hydroxycarbonyl groups.
9. (Currently Amended) A compound according to any preceding claim claim 1, wherein R⁴ represents:
 - a hydrogen atom;
 - a cyano group;
 - an alkyl, alkenyl or alkynyl group, which wherein the alkyl, alkenyl or alkynyl group is optionally substituted by one or more substituents selected chosen from halogen atoms, and hydroxy, acyloxy, alkoxy, aryloxy, alkylthio, arylthio, amino, mono- and or-di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and or-di-alkylcarbamoyl groups;
 - or a group of formula

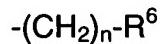


wherein n is an integer from 0 to 4 and R⁶ represents a 3- to 7-membered ring comprising from 1 to 4 heteroatoms ~~selected~~chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents ~~selected~~chosen from halogen atoms, and alkyl, phenyl, alkoxyphenyl, halophenyl, pyridyl, alkoxycarbonyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- ~~and~~ di-alkylamino, nitro, cyano, ~~and~~ trifluoromethyl groups;:

10. (Original) A compound according to claim 9 wherein R⁴ represents a hydrogen atom or a cyano group.
11. (Currently Amended) A compound according to ~~any preceding claim~~ claim 1, wherein R⁵ represents a group -COOR⁷, or a monocyclic or polycyclic aryl or a ~~monocyclic or polycyclic~~ heteroaryl group, ~~which~~wherein the ~~monocyclic or polycyclic~~ aryl or the ~~monocyclic or polycyclic~~ heteroaryl group are is optionally substituted by one or more substituents ~~selected~~chosen from:
 - halogen atoms;
 - alkyl groups, which are optionally substituted by one or more substituents ~~selected~~chosen from halogen atoms, and hydroxy, hydroxyalkyl, alkoxy, alkylthio, mono- or di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, ~~and~~ mono- ~~and~~ di-alkylcarbamoyl groups; and
 - hydroxy, alkylenedioxy, alkoxy, cycloalkyloxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfamoyl, amino, mono- ~~and~~ di-alkylamino, acylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- ~~and~~ di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulfamido, aminosuphonyl, mono- ~~and~~ di-alkylaminosulfonyl, cyano, difluoromethoxy, ~~and~~ trifluoromethoxy groups;

wherein R⁷ represents

- an alkyl group, which is optionally substituted by one or more substituents selectedchosen from halogen atoms, and hydroxy, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- and er-di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and er-di-alkylcarbamoyl groups
- or a group of formula



wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents selectedchosen from halogen atoms, and alkyl, hydroxy, alkoxy, alkyleneedioxy, alkylthio, amino, mono- and er-di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and er-di-alkylcarbamoyl, cyano, trifluoromethyl, difluoromethoxy, and er-trifluoromethoxy groups;
- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms selectedchosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents selectedchosen from halogen atoms, and alkyl, phenyl, hydroxy, alkoxy, alkyleneedioxy, amino, mono- and er-di-alkylamino, nitro, cyano, and er-trifluoromethyl groups;

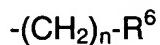
12. (Currently Amended) A compound according to claim 11, wherein R⁵ represents a monocyclic aryl or heteroaryl group, which wherein the monocyclic aryl or heteroaryl group is optionally substituted by one or more substituents selectedchosen from halogen atoms and alkyl groups.

13. (Currently Amended) A compound according to ~~any preceding claim~~claim 1, wherein
~~R¹ is selected chosen from the group consisting of~~ hydrogen atoms and alkyl groups, which are optionally substituted by one or more substituents ~~selected chosen from halogen atoms, and hydroxy, alkoxy, alkylthio, arylthio, hydroxycarbonyl and alkoxycarbonyl groups; and~~
~~R² is selected chosen from the group consisting of:~~
 - ~~hydrogen atoms,~~
 - ~~an acyl group~~
 - ~~an alkyl group, which is optionally substituted by one or more substituents selected chosen from halogen atoms, and hydroxy, alkoxy and alkylthio groups; and~~
 - ~~aryl or and heteroaryl groups, which wherein the aryl and heteroaryl groups are optionally substituted by one or more halogen atoms.~~
14. (Currently Amended) A compound according to claim 13, wherein R¹ is ~~selected chosen from the group consisting of~~ unsubstituted C₁₋₄ alkyl groups and R² is a hydrogen atom.
15. (Currently Amended) A compound according to ~~anyone of claims 13 to 14~~claim 14, wherein R³ represents a monocyclic or polycyclic, aryl or a monocyclic or polycyclic heteroaryl group, which wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group is are optionally substituted by one or more substituents ~~selected chosen from:~~
 - halogen atoms;
 - alkyl groups, which are optionally substituted by one or more substituents ~~selected chosen from halogen atoms and hydroxy groups; and~~
 - cyano, and hydroxycarbonyl groups;

16. (Currently Amended) A compound according to claim 15, wherein R³ represents a phenyl group or a monocyclic or polycyclic N-containing heteroaryl group, which groups wherein the phenyl group or the monocyclic or polycyclic N-containing heteroaryl group may be substituted by one substituent selectedchosen from halogen atoms, alkyl groups and hydroxycarbonyl groups.

17. (Currently Amended) A compound according to anyone of claims 13 to 16 claim 13, wherein R⁴ represents:

- a hydrogen atom;
- a cyano group;
- an alkyl, alkenyl or alkynyl group, which wherein the alkyl, alkenyl or alkynyl group is optionally substituted by one or more substituents selectedchosen from halogen atoms, and hydroxyl and alkoxy groups;
- or a group of formula



wherein n is 0 and R⁶ represents a 3- to 7-membered ring comprising from 1 to 4 heteroatoms selectedchosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents selectedchosen from halogen atoms, and alkyl and phenyl groups.

18. (Original) A compound according to claim 17 wherein R⁴ represents a hydrogen atom or a cyano group.

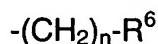
19. (Currently Amended) A compound according to anyone of claims 13 to 18 claim 13, wherein R⁵ represents a group -COOR⁷, or a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl group, which wherein the

monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are
is optionally substituted by one or more substituents selectedchosen from:

- halogen atoms;
- alkyl groups, which are optionally substituted by one or more substituents
selectedchosen from halogen atoms, and hydroxyl and alkoxy groups; and
- alkoxy, alkoxycarbonyl and hydroxycarbonyl groups;

wherein R⁷ represents

- an alkyl group, which is optionally substituted by one or more substituents
selectedchosen from halogen atoms, and hydroxyl and alkoxy groups
- or a group of formula



wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents
selectedchosen from halogen atoms, and alkyl, hydroxy, alkoxy,
alkylenedioxy, alkylthio, amino, mono- and er-di-alkylamino, nitro, acyl,
hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and er-di-
alkylcarbamoyl, cyano, trifluoromethyl, difluoromethoxy and er-
trifluoromethoxy groups;
- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms
selectedchosen from nitrogen, oxygen and sulphur, which ring is optionally
substituted by one or more substituents selectedchosen from halogen
atoms, and alkyl, phenyl, hydroxy, alkoxy, alkylenedioxy, amino, mono-
and er-di-alkylamino, nitro, cyano and er-trifluoromethyl groups.;

20. (Currently Amended) A compound according to claim 19, wherein R⁵ represents a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl- group,

which wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are is optionally substituted by one or more substituents selectedchosen from:

- halogen atoms;
- alkyl groups, which are optionally substituted by one or more substituents selectedchosen from halogen atoms, and hydroxyl and alkoxy groups; and
- alkoxy groups.

21. (Currently Amended) A compound according to claim 20, wherein R⁵ represents a monocyclic aryl or heteroaryl group, which is optionally substituted by one or more substituents selectedchosen from halogen atoms and alkyl groups.
22. (Currently Amended) A compound according to any preceding claim claim 1, wherein R¹ represents an alkyl group, R² represents a hydrogen atom or a group selectedchosen from acyl, alkyl, aryl and or heteroaryl groups, which wherein the acyl, alkyl, aryl and heteroaryl groups are optionally substituted by one or more halogen atoms, R³ represents a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl- group, which wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are is optionally substituted by one or more substituents selectedchosen from halogen atoms, cyano, hydroxycarbonyl and alkyl groups, which are optionally substituted by one or more hydroxy groups, R⁴ represents a hydrogen atom, a cyano group, an alkyl or alkenyl group, which wherein the alkyl or alkenyl groups are optionally substituted by one substituent selectedchosen from hydroxyl and alkoxy groups or R⁴ represents a group of formula (-R⁶) wherein R⁶ represents a 4- to 6-membered ring comprising from 1 to 3 heteroatoms selectedchosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one substituent selectedchosen from alkyl and phenyl groups and R⁵ represents a monocyclic aryl or monocyclic heteroaryl group, which is wherein the monocyclic

aryl or the monocyclic heteroaryl group are optionally substituted by one substituent selectedchosen from halogen atoms, alkyl and alkoxy groups;

23. (Currently Amended) A compound according to any preceding claim claim 1, wherein R¹ is selectedchosen from the group consisting of unsubstituted C₁₋₄ alkyl groups; R² is a hydrogen atom; R³ represents a phenyl group or a monocyclic or polycyclic N-containing heteroaryl group, which groupswherein the phenyl group or the monocyclic or polycyclic N-containing heteroaryl group may be substituted by one substituent selectedchosen from halogen atoms, alkyl groups and hydroxycarbonyl groups; R⁴ represents a hydrogen atom or a cyano group and R⁵ represents a monocyclic aryl or monocyclic heteroaryl group, which iswherein the monocyclic aryl or the monocyclic heteroaryl group are optionally substituted by one or more substituents selectedchosen from halogen atoms and alkyl groups.
24. (Currently Amended) A compound according to claim 1, which is one ofchosen from:
- 4-[(3-chlorophenyl)amino]-2-ethyl-5-(1-hydroxyethyl)-6-phenylpyridazin-3(2H)-one
- 4-[(3-chlorophenyl)amino]-2-ethyl-5-(1-methoxyethyl)-6-phenylpyridazin-3(2H)-one
- 4-[(3-chlorophenyl)amino]-2-ethyl-6-phenyl-5-vinylpyridazin-3(2H)-one
- 4-anilino-2,5-diethyl-6-phenylpyridazin-3(2H)-one
- 5-[(3-chlorophenyl)amino]-1-ethyl-6-oxo-3-phenyl-1,6-dihdropyridazine-4-carbaldehyde O-methyloxime
- 5-[(3-chlorophenyl)amino]-1-ethyl-6-oxo-3-phenyl-1,6-dihdropyridazine-4-carbonitrile
- 1-ethyl-5-{[4-(hydroxymethyl)phenyl]amino}-6-oxo-3-phenyl-1,6-dihdropyridazine-4-carbonitrile

1-ethyl-6-oxo-3-phenyl-5-[(3,4,5-trifluorophenyl)amino]-1,6-dihdropyridazine-4-carbonitrile

5-[(4-cyanophenyl)amino]-1-ethyl-6-oxo-3-phenyl-1,6-dihdropyridazine-4-carbonitrile

1-ethyl-3-(4-fluorophenyl)-5-[(4-(hydroxymethyl)phenyl)amino]-6-oxo-1,6-dihdropyridazine-4-carbonitrile

5-[(4-cyanophenyl)amino]-1-ethyl-3-(4-fluorophenyl)-6-oxo-1,6-dihdropyridazine-4-carbonitrile

1-ethyl-3-(4-fluorophenyl)-6-oxo-5-[(3,4,5-trifluorophenyl)amino]-1,6-dihdropyridazine-4-carbonitrile

1-ethyl-3-(4-fluorophenyl)-6-oxo-5-(pyridin-3-ylamino)-1,6-dihdropyridazine-4-carbonitrile

1-ethyl-3-(3-fluorophenyl)-5-[(4-(hydroxymethyl)phenyl)amino]-6-oxo-1,6-dihdropyridazine-4-carbonitrile

5-[(4-cyanophenyl)amino]-1-ethyl-3-(3-fluorophenyl)-6-oxo-1,6-dihdropyridazine-4-carbonitrile

1-ethyl-3-(3-fluorophenyl)-6-oxo-5-[(3,4,5-trifluorophenyl)amino]-1,6-dihdropyridazine-4-carbonitrile

4-[(3-chlorophenyl)amino]-2-ethyl-5-(2-methyl-1,3-thiazol-4-yl)-6-phenylpyridazin-3(2H)-one

4-[(3-chlorophenyl)amino]-2-ethyl-6-phenyl-5-(2-phenyl-1,3-thiazol-4-yl)pyridazin-3(2H)-one

4-[(3-chlorophenyl)amino]-2-ethyl-5-(1-methyl-1H-pyrazol-5-yl)-6-phenylpyridazin-3(2H)-one

4-{{2-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-3-oxo-6-phenyl-2,3-dihdropyridazin-4-yl}amino}benzonitrile

2-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-6-phenyl-4-[(3,4,5-trifluorophenyl)amino]pyridazin-3(2H)-one

4-[(3-chlorophenyl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one

2-ethyl-4-[(3-fluorophenyl)amino]-6-phenylpyridazin-3(2H)-one

2-ethyl-4-(1-naphthylamino)-6-phenylpyridazin-3(2H)-one
2-ethyl-6-phenyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-ethyl-6-phenyl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
4-(diquinolin-5-ylamino)-2-ethyl-6-phenylpyridazin-3(2H)-one
4-[bis(3,4,5-trifluorophenyl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one
4-[bis(3,4-difluorophenyl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one
4-[(3,4-difluorophenyl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one
4-[(3-chloro-4-fluorophenyl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one
4-[(2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]benzonitrile
2-ethyl-4-[(1-oxidopyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one
2-ethyl-6-pyridin-3-yl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-ethyl-4-[(1-oxidoquinolin-5-yl)amino]-6-phenylpyridazin-3(2H)-one
2-ethyl-6-pyridin-4-yl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-ethyl-4-(isoquinolin-4-ylamino)-6-phenylpyridazin-3(2H)-one
2-ethyl-6-phenyl-4-[(3,4,5-trifluorophenyl)amino]pyridazin-3(2H)-one
2-ethyl-4-[(4-fluorophenyl)amino]-6-phenylpyridazin-3(2H)-one
2-ethyl-6-pyridin-3-yl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
2-methyl-6-pyridin-3-yl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
2-ethyl-6-pyridin-4-yl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
2-ethyl-4-{{[4-(hydroxymethyl)phenyl]amino}-6-phenylpyridazin-3(2H)-one
4-[(2-methyl-3-oxo-6-pyridin-3-yl-2,3-dihydropyridazin-4-yl)amino]benzonitrile
4-[(2-ethyl-3-oxo-6-pyridin-3-yl-2,3-dihydropyridazin-4-yl)amino]benzonitrile
methyl 4-[(2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]benzoate
4-{{[2-ethyl-6-(1-oxidopyridin-3-yl)-3-oxo-2,3-dihydropyridazin-4-
yl]amino}benzonitrile
2-ethyl-4-(isoquinolin-4-ylamino)-6-pyridin-3-ylpyridazin-3(2H)-one
2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-pyridin-3-ylpyridazin-3(2H)-one
2-ethyl-4-(isoquinolin-4-ylamino)-6-pyridin-4-ylpyridazin-3(2H)-one
4-[(2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]benzoic acid
2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-pyridin-4-ylpyridazin-3(2H)-one

4-[(2-ethyl-3-oxo-6-pyridin-4-yl-2,3-dihdropyridazin-4-yl)amino]benzonitrile
4-[(2-ethyl-3-oxo-6-phenyl-2,3-dihdropyridazin-4-yl)(methyl)amino]benzonitrile
N-(4-cyanophenyl)-N-(2-ethyl-3-oxo-6-phenyl-2,3-dihdropyridazin-4-yl)acetamide
6-(3-chlorophenyl)-2-ethyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-ethyl-4-[methyl(quinolin-5-yl)amino]-6-phenylpyridazin-3(2H)-one
6-(3-chlorophenyl)-2-ethyl-4-(isoquinolin-4-ylamino)pyridazin-3(2H)-one
N-(2-ethyl-3-oxo-6-phenyl-2,3-dihdropyridazin-4-yl)-N-quinolin-5-yl acetamide
2-Ethyl-4-(4-hydroxymethyl-phenylamino)-6-pyridin-3-ylpyridazin-3(2H)-one
2-ethyl-4-(isoquinolin-4-ylamino)-6-(4-methoxyphenyl)pyridazin-3(2H)-one
2-ethyl-6-(4-methoxyphenyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
4-anilino-2-ethyl-6-phenylpyridazin-3(2H)-one
2-ethyl-6-(4-methylphenyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
2-ethyl-6-(4-methylphenyl)-4-[(1-oxidoquinolin-5-yl)amino]pyridazin-3(2H)-one
2-Ethyl-6-phenyl-4-(thieno[2,3-c]pyridin-3-ylamino)pyridazin-3(2H)-one
1-Ethyl-6-oxo-3-phenyl-5-(pyridin-3-ylamino)-1,6-dihdropyridazine-4-carbonitrile
1-Ethyl-3-(3-methylphenyl)-6-oxo-5-(pyridin-3-ylamino)-1,6-dihdropyridazine-4-carbonitrile
2-Ethyl-5-(1-hydroxyethyl)-6-phenyl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
2-Ethyl-6-(4-methylphenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-Ethyl-4-(isoquinolin-4-ylamino)-6-(4-methylphenyl)pyridazin-3(2H)-one
2-Ethyl-6-(4-methylphenyl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-3(2H)-one
2-Ethyl-6-(3-methylphenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-Ethyl-4-(isoquinolin-4-ylamino)-6-(3-methylphenyl)pyridazin-3(2H)-one
2-Ethyl-6-(3-methylphenyl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-3(2H)-one
4-[(2-Ethyl-6-(3-methylphenyl)-3-oxo-2,3-dihdropyridazin-4-yl)amino]benzoic acid
2-Ethyl-6-(5-methylpyridin-3-yl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-Ethyl-4-(isoquinolin-4-ylamino)-6-(5-methylpyridin-3-yl)pyridazin-3(2H)-one

2-Ethyl-6-(5-methylpyridin-3-yl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-3(2H)-one
2-Ethyl-4-(1,7-naphthyridin-5-ylamino)-6-phenylpyridazin-3(2H)-one
2-Ethyl-4-[1-Ethyl-6-oxo-3-phenyl-5-(pyridin-3-ylamino)-1,6-dihdropyridazin-4-yl]methyl acetate
[1-Ethyl-6-oxo-3-phenyl-5-(pyridin-3-ylamino)-1,6-dihdropyridazin-4-yl]methyl butyrate
2-Ethyl-5-[2-(4-methoxyphenyl)-1,3-thiazol-4-yl]-6-phenyl-4-(pyridin-3-ylamino) pyridazin-3(2H)-one
2-Ethyl-4-(isoquinolin-4-ylamino)-6-(6-methylpyridin-3-yl)pyridazin-3(2H)-one
2-Ethyl-6-(6-methylpyridin-3-yl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-Ethyl-5-[2-(4-methoxyphenyl)-1,3-thiazol-4-yl]-4-[(4-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one
2-Ethyl-6-phenyl-4-(pyridin-3-ylamino)-5-(2-pyridin-4-yl-1,3-thiazol-4-yl)pyridazin-3(2H)-one
2-Ethyl-4-[1-ethyl-6-oxo-3-phenyl-5-(pyridin-3-ylamino)-1,6-dihdropyridazin-4-yl]-1,3-thiazole-2-carboxylate
2-Ethyl-4-(isoquinolin-4-ylamino)-5-[2-(4-methoxyphenyl)-1,3-thiazol-4-yl]-6-phenylpyridazin-3(2H)-one
2-Ethyl-4-[(4-methylpyridin-3-yl)amino]-6-phenyl-5-(2-pyridin-4-yl-1,3-thiazol-4-yl)pyridazin-3(2H)-one
2-Ethyl-5-[2-(4-Chlorophenyl)-1,3-thiazol-4-yl]-2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one
5-[2-(4-Chlorophenyl)-1,3-thiazol-4-yl]-2-ethyl-6-phenyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
5-[2-(4-Chlorophenyl)-1,3-thiazol-4-yl]-2-ethyl-4-(isoquinolin-4-ylamino)-6-phenylpyridazin-3(2H)-one
2-Ethyl-4-[(4-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one
2-Ethyl-4-[(4-methyl-1-oxidopyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one
2-Ethyl-4-[(2-ethyl-3-oxo-6-phenyl-2,3-dihdropyridazin-4-yl)amino]benzoate.
Ethyl 4-[(2-ethyl-3-oxo-6-phenyl-2,3-dihdropyridazin-4-yl)amino]benzoate.

and/or a pharmaceutically acceptable salts thereof.

25. (Currently Amended) A pharmaceutical composition, comprising a compound according to any one of claims 1 to 24 claim 1 in admixture with and a pharmaceutically acceptable diluent or carrier.
26. (Cancelled) ~~Use of a compound according to any one of claims 1 to 24, in the manufacture of a medicament for the treatment or prevention of a pathological condition or disease susceptible to amelioration by inhibition of phosphodiesterase 4.~~
27. (Cancelled) ~~Use according to claim 26, wherein the medicament is for use in the treatment or prevention of a disorder which is asthma, chronic obstructive pulmonary disease, rheumatoid arthritis, atopic dermatitis, psoriasis or irritable bowel disease.~~
28. (Currently Amended) A method for treating a subject afflicted with a pathological condition or disease susceptible to amelioration by inhibition of phosphodiesterase 4, ~~which method comprises~~ comprising administering to the said subject an effective amount of a compound according to any of claims 1 to 24 claim 1.
29. (Original) A method according to claim 28, wherein the pathological condition or disease is asthma, chronic obstructive pulmonary disease, rheumatoid arthritis, atopic dermatitis, psoriasis or irritable bowel disease.
30. (Currently Amended) A combination product comprising:
 - (i) a compound according to any one of claims 1 to 24 claim 1; and

(ii) another compound ~~selected~~chosen from (a) steroids,
(b) immunosuppressive agents, (c) T-cell receptor blockers and
(d) antiinflammatory drugs.
~~for simultaneous, separate or sequential use in the treatment of the human or animal body.~~

31. (New) A method for treating a subject afflicted with a pathological condition or disease susceptible to amelioration by inhibition of phosphodiesterase 4, comprising administering to said subject an effective amount of a compound according to claim 1, and further comprising the simultaneous, separate or sequential administration to said subject of another compound chosen from (a) steroids, (b) immunosuppressive agents, (c) T-cell receptor blockers and (d) antiinflammatory drugs.